Sandia National Laboratories

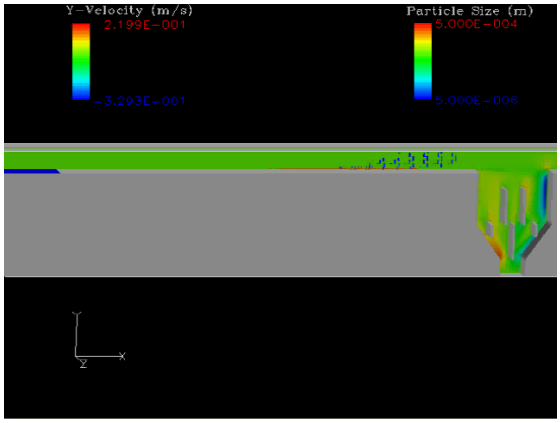
# Separation of Bedload and Suspended Load with Modified High-Shear Stress Flume

## Description

Sandia National Laboratories has designed, constructed, and tested a device to measure bedload and suspended load properties. This device attaches to the downstream section of an existing High-Shear Stress Flume owned by Sandia and contains traps to capture the bedload portion of transport.

## Purpose

Although it has been shown that the High-Shear Stress Flume is an extremely useful tool in determining sediment erosion properties, it only measures the bulk erosion and cannot distinguish between suspended load and bedload. Since the transport of sediments in an aquatic system are different for these two modes of erosion, it is very important to be able to separate the suspended load and the bedload from the currently measured bulk erosion.




*Modeling of the experimental design*

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